

REMARKS:

In the Office Action dated February 4, 2005, claims 1-33 in the above-identified U.S. patent application were rejected. Reconsideration of the rejections is respectfully requested in view of the above amendments and the following remarks. Claims 1-33 have been canceled and new claims 34-99 have been added to the application.

Claim 1 was objected to as including two sentences. Claim 1 has been canceled and new claims added to the application which are in proper form. In view of the cancellation of claim 1 this objection is moot.

Claims 1-9, 12-21, 23-25 and 26-33 were rejected under 35 USC §112, second paragraph as indefinite. Claims 1-33 have been canceled and new claims added to the application which clarify the language found indefinite. In view of the cancellation of claims 1-33, and the addition of new claims 34-84, applicants request that this rejection be withdrawn.

Claims 1-9, 12-21, 23-25 and 26-33 were rejected under 35 USC §112, first paragraph, as lacking enablement for how to make antibodies in a patient by eliciting an immune response against a receptor or large ligand. As acknowledged in the office action, the present application provides examples of a vaccine against EGF. Attached to the present response are references which show that ligands or receptors can be used to elicit the desired immune response in a patient. Birk et al., The 60-kDa heat shock protein modulates allograft rejection, *Proc. Natl. Acad. Sci.*, Vol. 96, pp 5159-5163, April 1999 shows that immunization with a large protein resulted in the same kind of antibodies as immunization with different peptides (see

page 5161 and figures 4 and 5). Sierra, et al., U.S. Patent Application No. US 2003/0054011A1 shows that a vaccine containing TGF α ligands is able to inhibit the growth of epithelial tumors. Molina, et al., U.S. Patent Application No. US 2002/0136735 A1 shows that growth factor receptors having tyrosine kinase activity can be used as antigens in vaccines (see paragraphs 43 and 47). Ramírez, et al., Specific Immune Response Induced by Immunization with Self Epidermal Growth Factor Receptor-Extracellular Domain (unpublished), teaches that immunization with Her-1 results in antibodies which block the binding of EGF to its receptor in mice. In view of the disclosure in the present application and the above discussed references which show that ligands and receptors can be used in vaccines to produce the desired immune response, applicants contend that the presently claimed invention is enabled and request that this rejection be withdrawn.

The specific humanized antibody of IOR R3 was rejected as lacking enablement. The new claims added to the application indicate that the humanized antibody has the same binding specificity as IOR R3. Though one may not be able to make the exact IOR R3 antibody following the procedures in the present application and the prior art, one could make an antibody with the same binding specificity as IOR R3. A humanized antibody which has the same binding specificity as IOR R3 is h-R3 which is referenced in figures 8 and 9 of the present application. h-R3 was deposited at the European Collection of Animal Cell Cultures (deposit no. 951110101). In view of the new claims added to the application, applicants request that this rejection be withdrawn.


Claims 1, 7, 12, and 29 were rejected under 35 USC §102(b) as anticipated by Michaeli. Michaeli discloses immunogenic compositions to the gastrin receptor. The gastrin receptor is in the class of G protein receptors not RTK receptors. Claims 1, 7, 12 and 29 have been canceled and new claims added to the application which clarify that the combination comprises an antibody against an RTK receptor or ligand of an RTK receptor and a vaccine which induces antibodies against an RTK receptor or ligand of an RTK receptor. In view of the new claims added to the application, applicants request that this rejection be withdrawn.

Claims 1, 7, 12 and 29-33 were rejected under 35 USC §103(a) as unpatentable over Michaeli. As discussed above, the new claims added to the application clarify that the combination comprises an antibody against an RTK receptor or ligand of an RTK receptor and a vaccine which induces antibodies against an RTK receptor or ligand of an RTK receptor. Michaeli does not suggest or disclose such antibodies or vaccines and thus he clearly does not suggest that such antibodies should be administered in combination with such vaccines for the treatment of tumors that are dependent on tyrosine kinase receptor activity. In view of the new claims added to the application, applicants request that this rejection be withdrawn.

Applicants respectfully submit that all of claims 34-99 are now in condition for allowance. If it is believed that the application is not in condition for allowance, it is respectfully requested that the undersigned attorney be contacted at the telephone number below.

In the event this paper is not considered to be timely filed, the Applicant respectfully petitions for an appropriate extension of time. Any fee for such an extension together with any additional fees that may be due with respect to this paper, may be charged to Counsel's Deposit Account No. 02-2135.

Respectfully submitted,

By 

Monica Chin Kitts
Attorney for Applicants
Registration No. 36,105
ROTHWELL, FIGG, ERNST & MANBECK, p.c.
Suite 800, 1425 K Street, N.W.
Washington, D.C. 20005